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09/684,075	10/08/2000	John Fors	0544MH-36340	2874

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EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/684,075

Applicant(s)

FORS, JOHN

Examiner

Akiba K Robinson-Boyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>g</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Due to communications filed 1/2/04, the following is a final office action. Claims 1-6 have been amended and claims 7-34 have been added. Claims 1-34 are pending in this application and have been examined on the merits. Claims 1-34 are rejected as follows.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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4. Claims 1-6, 8, 11, 12, 14, 16, 19, 20, 22-25, 27, 30, 31, 33, 34, are rejected under 35 U.S.C. 102(e) as being anticipated by Cherneff et al (US 6,233,493).

As per claims 1, 4, 23, 34 Cherneff et al discloses:

Using the computer system, selecting a set of candidate products to be developed/
a set of candidate products/select a set of candidate products to be developed/means
for selecting,; (Col. 9, lines 28-29, [selecting a sequence of products]);

Using the computer system, calculating a set of financial projections for each
candidate product, the set of financial projections for a candidate product providing a
future profit determination for each of a set of possible product introduction dates for
the candidates product/ a set of financial projections associated with each candidate
product, wherein the set provides a plurality of profit projections for each of a set of
possible introduction dates for the associated candidate product/calculated a set of
financial projections for each candidate product, the set of financial projections for a
candidate product providing a future profit determination for each of a set of possible
product introduction dates for the candidate product/means for calculating,; (Col. 3, lines
27-31[represented by financial measure and product introduction date is inherent since
the product completion date is disclosed, which also is a measure of time for the launch
of a product, in addition, Col. 2, lines 35-36, discloses the importance of incorporating
product launch time], lines 60-63, [future aggregate plans]),

Using the computer system, for each candidate product, determining based on the
set of financial projections an impact that the time of introduction has on profits
associated with the candidate product/for each candidate product, determine based on

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the set of financial projections an impact that the time of introduction has on profits associated with the candidate product/means for determining, (Col. 2, lines 34-41, [shows that product launch time is a critical factor in product development], col. 4, lines 41-44, [where an example of a constraint is time dependent sales and projected profit is optimized according to the time dependent sales]);

Using the computer system, providing at least one project definition for each candidate product, such project definitions each including a development schedule and resource requirements/a set of project definitions, at least one project definition associated with each candidate product, each of such project definitions comprising a development schedule and resource requirements/provide at least one project definition for each candidate product, such project definitions each including a development schedule and resource requirements/means for providing at least on project definition, (Col. 3, Lines 17-22; [defining model instances represents the project definitions], Col. 2, lines 47-49, lines 52-54, [required tasks that use resources])

Using the computer system, providing a set of available resources/ a set of available resources/provide a set of available resources/means for providing a set of available resources, (Col. 7, lines 55-58, [a resource available]); and

Using the computer system, generating a development schedule from the set of candidate products to maximize profit based on the determined impact that the time of introduction has on profits associated with each of the candidate products, the development schedule providing for product development in accordance with project definitions for each of the candidate products and resource constraints/ a planning

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engine for reading in the set of candidate products, the sets of financial projections for candidate products, the sets of project definitions for the candidate products, and the set of available resources, for selecting a set of candidate products that meets all resource availability constraints and maximizes profits, and for generating a development schedule for the selected set of candidate products/generating a development schedule from the set of candidate products to maximize profit based on the determined impact that the time of introduction has on profits associated with each of the candidate products, the development schedule providing for product development in accordance with project definitions for each of the candidate products and resource constraints/means for generating a development schedule, (Col. 4, line 54-Col. 5, line 3, [schedule building]).

As per claims 2, 5, 24, Cherneff et al discloses:

wherein each project definition comprises/wherein the project definitions comprise a plurality of ordered tasks for developing the product associated with the project definition, each task comprising a time requirement, a resource requirement, and an ordering constraint with respect to the other tasks in the project definition, (Col. 2, lines 52-54, [priority sequences, Col. 1, lines 24-26, [not missing deadlines], Col. 4, lines 41-44, [various constraints])

As per claims 3, 6, 25, Cherneff et al discloses:

wherein a candidate product includes at least two project definitions, the method comprising selecting one of the at least two project definitions in the development schedule for generating the development schedule/a candidate product comprises at

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lease two project definitions and the planning engine selects one or the at least two project definitions for inclusion in the development schedule, (Col. 7, lines 45-48, [plurality of product models], Col. 7, lines 60-61, [pipeline view for producing a set of products])).

As per claims 8, 16, 27, Cherneff et al discloses:

determining, based at least on the sets of financial projections for the candidate products, which products would generate the greatest profits; and prioritizing the candidate products that would generate the greatest profits in generating the development schedule, (col. 5, lines 50-53, [finding a prioritization that optimizes projected profit]).

As per claims 11, 19, 30, Cherneff et al discloses:

wherein at least one project definition comprises one or more phases for development of the associated candidate product, each phase comprising one or more of the plurality of ordered tasks, (Fig. 4, window 40b, col. 6, line 59-col. 7, line 4, [shows a product with several components and associated tasks]).

As per claim 12, 20, 31, Cherneff et al discloses:

further comprising assigning a probability of completion to each of the one or more phases, the probability of completion for use in allocating resources when generating the development schedule in accordance with the project definitions and the resource constraints, (Col. 8, lines 38-40, [probability of task failing based on projected finishing time]).

As per claims 14, 22, 33, Cherneff et al discloses:

further comprising generating as an output a projected profit number in addition to the development schedule, (Col. 4, lines 41-42, [projected profit optimized]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 9, 10, 15, 17, 18, 26, 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherneff et al (US 6,233,493), and further in view of Lesaint et al (US 6,578,005), as cited by applicant.

As per claims 7, 15, 26, Cherneff et al fails to disclose "wherein the financial projections for the candidate products are used as a weighted factor in generating the development schedule such that products more affected by time are scheduled for faster production than products less affected by time", but does disclose financial projections through time dependent sales in Col. 4, lines 40-44.

However, Lesaint et al discloses "wherein the financial projections for the candidate products are used as a weighted factor in generating the development schedule such that products more affected by time are scheduled for faster production than products less affected by time", (Col. 12, line 52-Col. 13, line 9, [priority given to

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the tasks that can be done immediately, with the greatest importance score]). Lesaint et al discloses this limitation in an analogous art for the purpose of showing that product schedules can be developed according to certain time constraints.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use weighted factors in generating the development schedule such that products more affected by time are scheduled for faster production with the motivation of processing tasks that can be done immediately first.

As per claims 9, 17, 28, Cherneff et al fails to disclose "wherein the ordering constraint defines a sequence for the plurality of ordered tasks, the sequence providing one or more of the following:

certain tasks must be completed before other tasks; and

certain tasks may be completed in parallel with certain other tasks", but does disclose product prioritization as measured in terms of profit maximization in the abstract, lines 9-11.

However, Lesaint et al discloses "wherein the ordering constraint defines a sequence for the plurality of ordered tasks, the sequence providing one or more of the following:

certain tasks must be completed before other tasks; and

certain tasks may be completed in parallel with certain other tasks", (col. 38, lines 52-54 and col. 13, lines 7-9, [sorted and scheduled in priority order according to processing times for tasks]). Lesaint et al discloses this limitation in an analogous art

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for the purpose of showing that products can be processed in accordance with time constraints]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to define a sequence for a plurality of ordered tasks with the motivation of defining a schedule for processing the tasks.

As per claims 10, 18, 29, Cherneff et al fails to disclose "wherein generating the development schedule comprises enforcing the ordering constraint when scheduling development of products", but does disclose generating a product development schedule in the abstract, lines 1-7.

However, Lesaint et al discloses wherein generating the development schedule comprises enforcing the ordering constraint when scheduling development of products, (Col. 13, lines 44-48, [scheduling the tasks according to ordered list]). Lesaint et al discloses this limitation in an analogous art with the motivation of scheduling tasks in an orderly fashion]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to generate a development schedule by enforcing the ordering constraint when scheduling development of products with the motivation of generating a product development schedule according to an ordered list.

7. Claims 13, 21, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherneff et al (US 6,233,493), and further in view of Lesaint et al (US 6,578,005), as cited by applicant and further in view of Miller (5,408,663), as cited by applicant.

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As per claims 13, 21, 32, neither Cherneff et al nor Lesaint et al disclose "for each phase of product development, multiplying resources required for the phase by a product of the probability of completion for the phase and the probabilities of completion for all preceding phases", but does disclose phases of development of products as shown in Cherneff et al, Fig. 4, window 40b and Lesaint et al in the abstract, lines 10-12.

However, Miller discloses "for each phase of product development, multiplying resources required for the phase by a product of the probability of completion for the phase and the probabilities of completion for all preceding phases" in col. 18, lines 13-16, where the importance score multiplier is disclosed in Col. 13, lines 24-31, [multiplying cost per unit time of the resource assigned to meet that requirement by the amount of time required to meet the requirement where the cost per unit time of the resource assigned to meet the requirement represents the resource since the resource must be defined when determining the cost per unit time and the amount of time required to meet the requirement for that particular resource represents the probability of completion since the probability that the task will be completed depends on the amount of required time to complete the task]). Miller discloses this limitation in an analogous art for the purpose of ultimately calculating the cost of a resource assigned to meet a requirement for that resource and also determining the overall effects.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Friday, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



A. R. B.

April 1, 2004



TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
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